THERE IS CLAIMED:

1. A receiver device for a mobile radiocommunication unit communicating with a base station via a propagation channel comprising a pathfinder for determining time-delays associated with a multipath signal applied to its input, said multipath signal being also applied to a first input of a combiner circuit and to a first input of a channel estimator, the output of said pathfinder being connected to a second input of said combiner circuit and to a second input of said channel estimator, which channel estimator provides an estimate of said propagation channel to a first input of a filter unit, adapted to provide an optimum estimate of said propagation channel to a third input of said combiner circuit as a function of the speed of the mobile radiocommunication unit, wherein said receiver device further includes a speed estimator for estimating the speed of said mobile radiocommunication unit, whose input is connected to the output of said channel estimator and whose output is connected to a second input of said filter unit, thereby supplying to it the estimated speed of said mobile radiocommunication unit in order to select the appropriate Wiener filter corresponding to the estimated speed.
2. The device claimed in claim 1, wherein said filter unit is made up of a plurality of Wiener filters.
3. The device claimed in claim 2, wherein each Wiener filter of said filter unit is matched to a different range of contiguous speeds of said mobile radiocommunication unit.
4. A method of estimating the speed of a mobile radiocommunication unit in a receiver device claimed in claim 1, which method consists of estimating said speed by measuring the phase difference between two channel coefficients obtained from a channel estimator in accordance with the following equation:

$V_{n,p} = c. (\phi_{n+p}-\phi_n) / (2\pi.f_c.T_S)$

in which:

$V_{n,p}$ is the speed at time n, calculated with a difference p between the two phases of the two channel coefficients taken into consideration,

c is the speed of light;

f_c is the carrier frequency,

T_S is the sampling period of the channel coefficients,

ϕ_n is the phase of the channel coefficient at time n, and

ϕ_{n+p} is the phase of the channel coefficient at time n+p.

5. The method claimed in claim 4, which includes the following steps:

a) adaptively measuring said speed as a function of the power profile of a multipath signal;

b) estimating the phase variation and adapting the difference between the two phases to be measured as a function of said speed of said mobile radiocommunication unit, so as to reduce the average estimation error of said channel coefficients;

c) calculating the instantaneous speed;

d) averaging said instantaneous speed by means of a filter; and

e) improving the convergence time of the speed estimate.

6. The method claimed in claim 5, wherein step b) reduces the average estimation error by dividing it by the difference.

7. The method claimed in claim 5, wherein step d) consists in using a low-pass filter.

8. The method claimed in claim 5, wherein step e) consists in varying the time constant of the filter used in step d) as a function of time.